IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS :	James Patrick Goodwin *et al.*	CONFIRMATION NO.:	4962
SERIAL NO.:	10/044,913	EXAMINER:	Kyle R. Stork
FILING DATE:	January 15, 2002	ART UNIT:	2178
FOR :	SYSTEM AND METHOD FOR USING XML TO NORMALIZE DOCUMENTS		

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA. 22313-1450

Dear Sir:

Further to the Notice of Appeal filed on August 23, 2006, and in response to the Notice of Panel Decision from Pre-Appeal Brief Review mailed October 17, 2006, Appellants respectfully submit an Appeal Brief pursuant to 37 C.F.R. § 41.37.

The Director is authorized to charge the $500.00 fee for filing an Appeal Brief pursuant to 37 C.F.R. § 41.20(b)(2). The Director is further authorized to charge any additional fees that may be due, or credit any overpayment of same to Deposit Account No. 033975 (**Ref. No. 042846-0313082**).

REQUIREMENTS OF 37 C.F.R. §41.37

I. 37 C.F.R. § 41.37(c)(1)(i) – REAL PARTY IN INTEREST

The real party in interest is International Business Machines Corporation.

II. 37 C.F.R. § 41.37(c)(1)(ii) – RELATED APPEALS AND INTERFERENCES

There are no related appeals and/or interferences.

III. 37 C.F.R. § 41.37(c)(1)(iii) – STATUS OF CLAIMS

Pending: Claims 1-20 are pending.

Cancelled: No claims are cancelled.

Rejected: Claims 1-20 stand rejected.

Allowed: No claims have been allowed.

On Appeal: The rejections of claims 1-20 are appealed.

IV. 37 C.F.R. § 41.37(c)(1)(iv) – STATUS OF AMENDMENTS

The claims have not been amended subsequent to the final rejection mailed May 23, 2006.

V. 37 C.F.R. § 41.37(c)(1)(v) – SUMMARY OF CLAIMED SUBJECT MATTER

In general, the claimed invention relates to the management and maintenance of a knowledge management system that includes objects, such as documents,

stored within one or more object repositories. *See, e.g.*, the specification, page 4, line 14-page 5, line 2. The claimed invention may enable management and maintenance in instances in which the knowledge management system includes object repositories with different object repository types (*e.g.*, a Lotus Notes database, Lotus QuickPlace data base, a Domino.doc database, an electronic mail system, a web repository, a file system, *etc.*). *See, e.g., id.* By implementation of the claimed invention, objects within the knowledge management system may be processed to maintain and/or manage the objects in a manner that is relatively transparent to end-users (*e.g.*, without substantial "down time"). This processing may provide increased functionality to end-users, reduce the amount of storage space required to store the objects, enable more complete recovery of the objects in case of system failure, and/or provide other enhancements. *See, e.g.*, the specification, page 2, line 12-page 3, line 2. The processing may include normalizing the object repositories to reduce duplicative storage of objects, full-text indexing the objects, topically categorizing the objects based on the contents thereof, extracting metrics information from the objects, and/or other processing. *See, e.g., id.* In order to process the objects without making the same unavailable to end-users, meta-document representations of the objects may be generated and the meta-document representations may be processed so that the processing of objects can take place asynchronously, and meta-data already present in the objects will be preserved. *See, e.g.*, the specification, page 3, lines 3-14.

A. INDEPENDENT CLAIMS

1. Claim 1

One aspect of the invention relates to a method for using extensible markup language to normalize one or more object repositories, each of the one or more object repositories having one of a plurality of object repository types. In some embodiments, the method comprises determining, from the plurality of possible

object repository types, the one or more object repository types of the one or more object repositories that store at least one object, wherein the object comprises metadata (*see*, *e.g.*, the specification, page 3, lines 5 and 6); identifying the at least one object stored in the one or more object repositories (*see*, *e.g.*, the specification, page 3, lines 6-8); extracting at least one portion of the at least one object, by generating a meta-document representation of the at least one portion, the meta-document representation being generated in extensible markup language (XML) format (*see*, *e.g.*, the specification, page 10, lines 14-18); transmitting the meta-document representation to a processor (*see*, *e.g.*, the specification, page 10, lines 18-20); and processing the meta-document representation on the processor to normalize the one or more object repositories, wherein processing the meta-document representation comprises mapping a field in the meta-document representation with a field designation identifier (*see*, *e.g.*, the specification, page 10, line 22-page 11, line 2).

2. Claim 6

Another aspect of the invention relates to a system for using extensible markup language to normalize one or more object repositories, each of the one or more object repositories having one of a plurality of possible object repository types. In some embodiments, the system comprises a determining module (*e.g.*, spider component 104), an identifying module (*e.g.*, document identifier assigning module 306), an extracting module (*e.g.*, work request processing module 310), and a transmitting module (*e.g.*, information content transmitting module 314). The determining module may determine, from the plurality of possible object repository types, the one or more object repository types of the one or more object repositories that store at least one object, wherein the at least one object comprises metadata. *See*, *e.g.*, the specification, page 3, lines 5 and 6. The identifying module may identify the at least one object stored in the one or more object repositories. *See*, *e.g.*, the specification, page 9, lines 9-11. The extracting module may extract at least

one portion of the at least one object by generating a meta-document representation of the at least one portion, the meta-document representation being generated in extensible markup language (XML) format. *See, e.g.*, the specification, page 9, lines 15-17. The transmitting module may transmit the meta-document representation to a processor that processes the meta-document representation to normalize the one or more object repositories. *See, e.g.*, the specification, page 9, lines 20 and 21. Processing the meta-document representation comprises mapping a field in the meta-document representation with a field designation identifier. *See, e.g.*, the specification, page 10, lines 2-4, and line 22-page 11, line 2.

3. Claim 11

Another aspect of the invention relates to a system for using extensible markup language to normalize one or more object repositories, each of the one or more object repositories having one of a plurality of possible object repository types. In some embodiments, the system may comprise determining means, identifying means, extracting means, and transmitting means. The determining means may include *at least* spider component 104, and may determine, from the plurality of possible object repository types, the one or more object repository types of the one or more object repositories that store at least one object, wherein the object comprises metadata. *See, e.g.*, the specification, page 3, lines 5 and 6. The identifying means may include *at least* document identifier assigning module 306 and may identify the at least one object stored in the one or more object repositories. *See, e.g.*, the specification, page 9, lines 9-11. The extracting means may include *at least* work request processing module 310 and may extract at least one portion of the at least one object by generating a meta-document representation of the at least one portion, the meta-document representation being generated in extensible markup language (XML) format. *See, e.g.*, the specification, page 9, lines 15-17. The transmitting means may include *at least* information content transmitting module 314 and may transmit the meta-document representation to a processor that

processes the meta-document representation to normalize the one or more object repositories. *See, e.g.*, the specification, page 9, lines 20 and 21. Processing the meta-document representation comprises mapping a field in the meta-document representation with a field designation identifier. *See, e.g.*, the specification, page 10, lines 2-4, and line 22-page 11, line 2.

4. Claim 16

Another aspect of the invention relates to a processor readable medium comprising processor readable code for causing a processor to normalize one or more object repositories, each of the one or more object repositories having one of a plurality of possible object repository types. In some embodiments, the medium comprises determining code, identifying code, extracting code, and transmitting code. The determining code may cause a processor to determine, from the plurality of possible object repository types, the one or more object repository types of the one or more object repositories that store at least one object, wherein the at least one object comprises metadata. *See, e.g.*, the specification, page 3, lines 5 and 6. The identifying code may cause a processor to identify the at least one object stored in the one or more object repositories. *See, e.g.*, the specification, page 3, lines 6-8. The extracting code may cause a processor to extract at least one portion of the at least one object by generating a meta-document representation of the at least one portion, the meta-document representation being generated in extensible markup language (XML) format. *See, e.g.*, the specification, page 10, lines 14-18. The transmitting code may cause a processor to transmit the meta-document representation to a processor. *See, e.g.*, the specification, page 10, lines 18-20. The processing code may cause the processor to process the meta-document representation to normalize the one or more object repositories, wherein processing the meta-document representation comprises mapping a field in the meta-document representation with a field designation identifier. *See, e.g.*, the specification, page 10, line 22-page 11, line 2.

B. SEPARATELY ARGUED DEPENDENT CLAIMS

1. Claims 2, 3, 7, 8, 12, 13, 17, and 18

In some embodiments of the invention, some of the metadata is preserved. The preserved metadata may include one or more of an author, a title, a subject, a date created, a date modified, a list of modifiers, or link list information. *See, e.g.*, the specification, page 3, lines 9-11.

2. Claims 4, 9, 14, and 19

In some embodiments of the invention, processing the meta-document representation further comprises one or both of categorization and full-text indexing. *See, e.g.*, the specification, page 3, lines 12-14.

3. Claims 5, 10, 15, and 20

In some embodiments of the invention, the processor comprises one or more of a full-text engine, a metrics engine, or a taxonomy engine. *See, e.g.*, the specification, page 3, lines 12-14.

VI. 37 C.F.R. § 41.37(c)(1)(vi) – GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL.

Claims 1, 6, 11, and 16 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over U.S. Patent No. 6,772,137 to Hurwood *et al.* ("Hurwood") in view of U.S. Patent Application Publication No. 2002/0107861 to Clendinning *et al.* ("Clendinning"). Claims 2-4, 7-9, 11-14, and 17-19 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Hurwood and Clendinning in further view of EP 1143356 to Shanahan (hereinafter "Shanahan"). Claims 5, 10, 15, and 20 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Hurwood and Clendinning in further view of U.S. Patent No. 6,553,365 to Summerlin *et al.* (hereinafter "Summerlin").

VII. 37 C.F.R. § 41.37(c)(1)(vii) – ARGUMENT

A. CLAIMS 1, 6, 11, AND 16

The rejection of claims 1, 6, 11, and 16 based on Hurwood and Clendenning is improper because neither Hurwood, nor Clendenning, nor any proper combination thereof, teach or suggest all of the features of the claimed invention. For example, neither Hurwood nor Clendinning teaches "**extracting at least one portion of the at least one object by generating a meta-document representation of the at least one portion...[, and] processing the meta-document representation on the processor to normalize the one or more object repositories, wherein processing the meta-document representation comprises mapping a field in the meta-document representation with a field designation identifier**," as is recited in claim 1. Claims 6, 11, and 16 include similar subject matter.

1. Hurwood does not teach or suggest the features of the claimed invention recited above.

In the final Office Action mailed May 23, 2006 (hereinafter "the 5/23/2006 Office Action"), the Examiner asserts that Hurwood teaches "extracting at least one portion of the at least one object, wherein the at least one portion is extracted in extensible markup language." *See* the 5/23/2006 Office Action, page 3. For support of this assertion, the Examiner relies on Hurwood at column 6, lines 45-51, which reads as follows.

> In one embodiment, reporting system documents may be embedded in each other. In one embodiment, the reporting system documents may be XML documents. Although many different types of documents may be used with the object management system of the present invention, objects 306 stored in the object repository 304 will be described with reference to XML documents for illustration purposes.

This, and other portions of Hurwood, appear to discuss managing report

objects (*e.g.*, object 306 in FIG. 3) stored in a single object repository (*e.g.*, object repository 304 in FIG. 3). The report objects are stored in XML form. *See*, Hurwood, col. 6, lines 37-51. The XML report objects in Hurwood are accessible by users in response to user queries. *See*, Hurwood, col. 1, lines 47-53.

One of the fundamental flaws in the rejection made by the Examiner is that even if Hurwood did teach "extracting at least one portion of the at least one object, wherein the at least one portion is extracted in extensible markup language," as the Examiner alleges (although this is not conceded), the Examiner fails to provide any evidence that Hurwood necessarily teaches "**extracting at least one portion of the at least one object by generating a meta-document representation of the at least one portion**," as is recited in claim 1. When a user retrieves one of the report objects in Hurwood, the XML file that is retrieved is the actual report object, and not a meta-document representation of the object that is stored in the object repository. In contrast, the claimed invention includes generating a meta-document representation of an object because the meta-document representation represents information (*e.g.*, at least some of the information included in the object) that is stored in some other format (*e.g.*, an XML copy of a file stored in a different format).

Another legal deficiency with the pending rejection is that Hurwood does not teach "**processing the meta-document representation on the processor to normalize the one or more object repositories**," as is recited in claim 1. The Examiner alleges that Hurwood teaches "processing the at least one portion" in FIG. 2, and at column 5, lines 14-16. *See* the 5/23/2006 Office Action, page 3. Lines 14-16 of column 5 read as follows:

> In step 206, the user input query may be preliminarily processed, for instance, to determine whether it includes valid fields and for other formatting and error-flagging issues.

For convenience, FIG. 2 is also reproduced below.

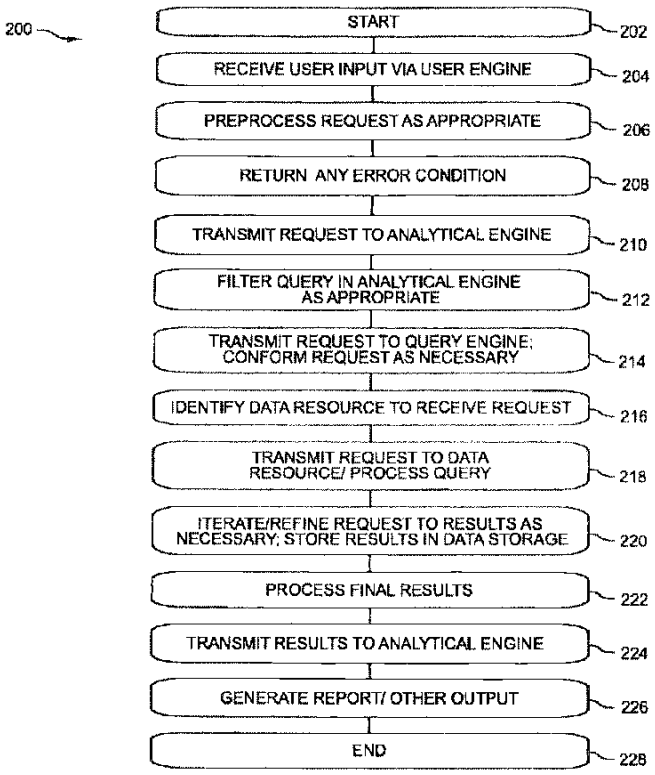


FIG. 2

Again the Examiner has failed to provide evidence that Hurwood discloses all of the claim recitations. Even if the cited portions of Hurwood teach, as the Examiner maintains, processing information, the Examiner fails to provide evidence that Hurwood discloses normalizing object repositories. Therefore, the cited of portions of Hurwood do not teach or suggest the claimed feature of "**processing the meta-document representation on the processor to normalize the one or more object repositories.**"

As another example of the legal deficiencies in the rejection based on Hurwood, the Examiner admits that "Hurwood fails to specifically disclose mapping at least one field in the at least one object with a field designation identifier." *See* the 5/23/2006 Office Action, page 3. The Examiner relies on Clendenning as teaching this feature. However, as is discussed below, the cited portion of Clendenning is

also deficient with respect to this feature of the claimed invention.

2. Clendenning does not teach or suggest the features of the claimed invention recited above.

In the 5/23/2006 Office Action, the Examiner argues that Clendenning discloses generating a meta-document representation of a portion of a repository at paragraph 0038. *See* the 5/23/2006 Office Action, page 4. Paragraph 0038 of Clendenning reads as follows:

> The scrapers preferably create an output using Extensible Markup Language ("XML") to return information from the third-party site in a usable format. XML is a web language similar to the standard hypertext markup language ("HTML"), but the XML rules are more complex to allow more varied uses. In particular, XML is more interactive and better suited for electronic commerce because the coding contains markers the simplify the standardization of information over the Internet. This feature allows the use of intelligent agents that seek out consistent information and then act on what they find. Furthermore, the parsers in XML can be small and fast and can read complex hierarchical structures.

From this and other portions of Clendenning, it appears that Clendenning discloses a system that gathers product information related to commercial products from a variety of external sources (*e.g.*, websites, merchant catalogs, external databases, *etc.*), and then organizes and stores the information on a product-by-product basis in a database. *See* Clendinning, paragraph 0019. As is noted in paragraph 0038 of Clendenning, reproduced above, the information is gathered from the sources by scrapers that provide the information to the system in an XML format. The Examiner further alleges that Clendenning teaches normalizing one or more repositories, and mapping a field in the meta-document representation with a field designation identifier in paragraphs 0048-0051 (*see* the 5/23/2006 Office Action, page 4), which read as follows:

> If the identifier is found, at step 1006 normalization of the domains, attributes and values is initiated. It is noted that translations are performed in a product-specific manner; thus, the attribute alias list for the attribute

"display_res" for a laptop does not apply to a PDA device or a desktop PC. Similarly, the value alias list for the value "1024.times.768" for a laptop would be specific to the attribute "display_res" within the laptop domain and would not apply to a value for an attribute. Thus, at step 1007 the domain name of the object is compared against a domain alias list, and translated into its canonical representation as indicated in the alias list. Once the canonical domain name is obtained, each of the attributes is compared with the alias list of attributes associated with the canonical domain name map at step 1008, and each value of the attribute/value pair is then compared with the canonical attribute map at step 1009. At step 1010 it is determined whether additional attribute/value pairs exist in the new information that need to be normalized. If so, the process returns to step 1008. If not, the process ends at step 1011. Alternatively, all of the attributes can be translated together at step 1008, and then all of the values associated with each attribute can be translated together at step 1009.

According to the invention, all information in the entire database can be updated to normalize data already in the database in real time as the aliases are added to the database, by maintaining the translation rules together with the data set in the database. Additionally, the normalization process enables all attribute information to be normalized to a common unit base (e.g., normalizing all units of length into millimeters, etc.).

An example of such a domain map 3000 is shown in FIG. 3. Each core product identifier 3001 has a canonical domain 3002, which in turn is associated with a number of canonical attributes 3003, 3004, 3005. For each of the attributes an alias list is maintained containing all known aliases for the canonical attribute. The same applies to values for each attribute. The values are sorted in numerical order where possible; for values which are not simple numbers, the sorting order can be defined by the operator on a per attribute basis. By identifying the same attribute values as pointing to the same product, it is possible to effect product and domain merges in the database automatically by defining a threshold overlap level by which attributes for separate product records in the database are the same. Once the two (or more) separately stored product records have been identified as pertaining to the same product, the records can be merged into a single record in the database containing all of the product attributes in one location.

The domain editor is a Java application user interface used to manipulate data in the database, such as setting the display characteristics for the domain and attribute strings, allowing the operator to translate and normalize attribute and value information, editing of data values, merging attributes, and merging domains. By setting a threshold

> level of overlap, the normalization engine can automatically suggest to a user possible domain merges or product merges.

As is clear from these paragraphs, the implementation of the XML documents in Clendenning is not for normalizing, or otherwise organizing or maintaining, the external information sources from which the information was obtained. Instead, in Clendenning, a method is disclosed in which (i) information about commercial products is obtained from external sources, the information is obtained by scrapers that generate XML files that contain the information, (ii) the XML files are examined to determine whether the information that they contain is already stored in a new database that contains a catalog of information about different commercial products, and (iii) if the information is not duplicative of previously stored information, the XML documents are added to the new database. This database may be accessed by users to determine information about product prices. Thus, while, for example, paragraphs 0048 and 0049 discuss the normalization of a database, this database is the new database that is being assembled (by ensuring that duplicative information is not entered in the first instance), and not the external information sources from which the information found in the XML documents was gleaned.

In contrast, the claimed invention includes "**processing the meta-document representation on the processor to normalize the one or more object repositories**." The claims make it abundantly clear that the one or more object repositories being normalized include at least the one or more object repositories storing the original object (the object from which the meta-document representation is generated). For example, claim 1 recites, *inter alia*, "**the one or more object repositories that store at least one object[;]...extracting at least one portion of the at least one object, by generating a meta-document representation of the at least one portion...[; and] a processor that processes the meta-document representation to normalize the one or more object repositories**." In other words, the portion of the Clendenning on which the Examiner relies as teaching

normalization discusses the normalization of the database that stores the XML documents. Even if these XML documents are considered to be analogous to the claimed meta-document representation, Clendenning only discussed the normalization of and not the one or more object repositories that store the one or more objects from which the meta-document is generated, which are the object repository(ies) normalized in the claimed invention. Therefore, as was the case with Hurwood, the passages of Clendenning relied on by the Examiner do not teach or suggest "**processing the meta-document representation on the processor to normalize the one or more object repositories**."

As was mentioned above, the Examiner further alleges that Clendenning teaches mapping a field in the meta-document representation with a field designation identifier in paragraphs 0048-0051. *See* the 5/23/2006 Office Action, page 4. These paragraphs actually teach comparing a product identifier with a product name list that includes aliases of various products in order to correctly associate information that identifies the same product by different aliases. As such, the cited portions or Clendinning do not teach or suggest "**mapping a field in the meta-document representation with a field designation identifier**." Accordingly, as is also true of the cited portions of Hurwood, the passages of Clendinning relied on by the Examiner fail to teach or suggest at least the features of the claimed invention provided above.

3. Conclusion

Therefore, the Examiner has failed to demonstrate that Hurwood, Clendenning, or a proper combination thereof teach or suggest (1) "**extracting at least one portion of the at least one object by generating a meta-document representation of the at least one portion**," (2) "**processing the meta-document representation on the processor to normalize the one or more object repositories**," and/or (3) "**wherein processing the meta-document representation**

comprises mapping a field in the meta-document representation with a field designation identifier." For any one of these omissions and/or other improprieties in the rejection, the rejection of claims 1, 6, 11, and 16 are improper and should be overturned. Further, claims 2-5, 7-10, 12-15, and 17-20 depend from corresponding ones of claims 1, 6, 11, and 16. Accordingly, the rejection of claims 2-5, 7-10, 12-15, and 17-20 should be overturned based on their dependency as well as for the features that they recite individually.

B. **CLAIMS 2, 3, 7, 8, 12, 13, 17, AND 18**

The rejections of claims 2, 3, 7, 8, 12, 13, 17, and 18 based on Hurwood and Clendenning in view of Shanahan are improper because (1) Shanahan is non-analogous art, and (2) the Examiner has not provided a proper motivation for combining the cited references.

1. Shanahan is non-analogous art.

Shanahan does not qualify as prior art under 35 U.S.C. 103(a) for the purposes of this application because it is non-analogous art. A reference constitutes non-analogous art if it is from a different field of endeavor than the claimed invention, unless it is "reasonably pertinent to the particular problem with which the inventor was involved." *Cross Medical Products, Inc. v. Medtronic Sofamor Danek, Inc.*, 424 F.3d 1293, 76 U.S.P.Q.2d 1662 (Fed.Cir. 2005)(citation omitted).

The field of endeavor of the instant application is the normalization of information stored in one or more object repositories using extensible markup language. *See* the specification at page 1 and independent claims 1, 6, 11, and 16. In contrast, the disclosure of Shanahan is drawn to "the management and use of documents which act as autonomous agents, generating requests for information, then seeking, retrieving and packaging responses." *See* Shanahan at paragraph [0001]. Thus, the claimed invention and the disclosure of Shanahan are from

different fields of endeavor. Further, Shanahan is related to the information supplementation of individual documents, and does not pertain to the maintenance, organization, or management of object repositories that store a plurality of documents.

In particular, the solution of Shanahan includes morphing a more conventional document into a meta-document by embedding meta-data into the document that generates automatic requests for additional data about people, companies, topics, *etc.* found in the document from the Internet. Information retrieved in response to the automatic requests is then embedded into the original document. *See* Shanahan, paragraphs 0012-0019. As such, the discussion of the meta-document provided by Shanahan is directed to providing supplemental information to individual documents without regard to the storage of the individual documents. The disclosure of Shanahan is not in the same field as the normalization of object repositories storing collections of objects, and is not even reasonably pertinent thereto. Therefore, Shanahan constitutes non-analogous art for the purposes of this application and cannot legally be relied upon in the obviousness rejection. For at least this reason, the rejection of claims 2, 3, 7, 8, 12, 13, 17, and 18 based on the combination of Hurwood, Clendinning, and Shanahan is legally improper and must be overturned.

2. The Examiner has not provided a proper motivation for combining the cited references.

The Examiner admits that Hurwood does not teach or suggest preserving metadata during the generation of a meta-document representation. *See* the 5/23/2006 Office Action, page 5. The Examiner proposes combining Shanahan with Hurwood to provide this functionality. *Id.* Even if Shanahan could properly be used in an obviousness rejection, this combination is improper because the Examiner has not pointed to a legally proper motivation for combining the cited references.

In order to properly combine references, the Examiner must provide a motivation for the combination. The motivation should (i) include a specific reason that the proposed combination would be desirable (provide an enhancement over the prior art), and (ii) provide evidence that this reason would have been known to one of ordinary skill in the art. *See In re Fulton*, 391 F.3d 1195, 73 U.S.P.Q.2d 1141 (Fed.Cir. Dec 02, 2004).

The Examiner alleges that one of ordinary skill in the art would have been motivated to combine Hurwood (teaching an object management system) with Shanahan (teaching a system and method for providing automated information supplementation of previously "static" documents), "since it would have allowed a user to store data about a document." This statement is improper because (i) it would not have provided motivation to combine the cited references, and (ii) the Examiner has not provided any evidence that suggests that this alleged motivation would have been available to one or ordinary skill in the art. For at least this reason, the rejection of claims 2, 3, 7, 8, 12, 13, 17, and 18 based on the combination of Hurwood, Clendinning, and Shanahan is legally improper and must be overturned.

C. **CLAIMS 4, 9, 14, AND 19**

As has been addressed above, the rejections of claims 4, 9, 14, and 19 based on Hurwood, Clendinning, and Shanahan are improper at least because Shanahan is non-analogous art, and because the Examiner has not provided a proper motivation for combining the cited references. Further, the rejections of claims 4, 9, 14, and 19 are improper because the Examiner has failed to address the features of the claimed invention provided in these claims.

For example, claims 4, 9, 14, and 19 recite, inter alia, "**wherein processing the meta-document representation further comprises one or both of categorization and full-text indexing.**" This feature is not taught or suggested by Hurwood, Clendinning, and/or Shanahan.

In rejecting claim 4, the Examiner admits that "Hurwood fails to specifically disclose mapping at least one field in the at least on object with a field designation identifier." The 5/23/2006 Office Action, pages 5 and 6. The Examiner then argues that a portion of Shanahan teaches this functionality. *Id.* It appears to Applicants that this portion of the rejection would perhaps be more germane to the section of the 5/23/2006 Office Action that addresses claims 1, 6, 11, and 16. In any case, in the portion of the 5/23/2006 Office Action that address claims 4, 9, 14, and 19, the Examiner does not even explicitly state that Hurwood, Clendinning, and/or Shanahan teach or suggest the claimed feature provided above. See the 5/23/2006 Office Action, page 6. For at least this reason the rejections of claims 4, 9, 14, and 19 are legally improper and should be overturned.

D. CLAIMS 5, 10, 15, AND 20

The rejections of claims 5, 10, 15, and 20 based on Hurwood and Clendenning in view of Summerlin is improper at least because the cited references do not teach or suggest all of the features of the claimed invention. For example, these claims recite, *inter alia*, "**wherein the processor comprises at least one of a full-text engine, a metrics engine, and a taxonomy engine**." This features is not taught or suggested by the cited references.

The Examiner acknowledges that both Hurwood and Clendenning are deficient with respect to this feature. *See* the 5/23/2006 Office Action, page 7. However, the Examiner alleges that this features is taught by Summerlin at column 12, lines 16-20, and in FIG. 6. *Id.* Column 12, lines 16-20 of Summerlin read as follows:

> FIG. 6 also depicts the relationship between the enterprise records database 28 in FIG. 2, the file plan taxonomy engine and the classification agent 32 during the training mode of operation as shown in the diagram area surrounded by dotted box 35.

For convenience, FIG. 6 of Summerlin is reproduced below:

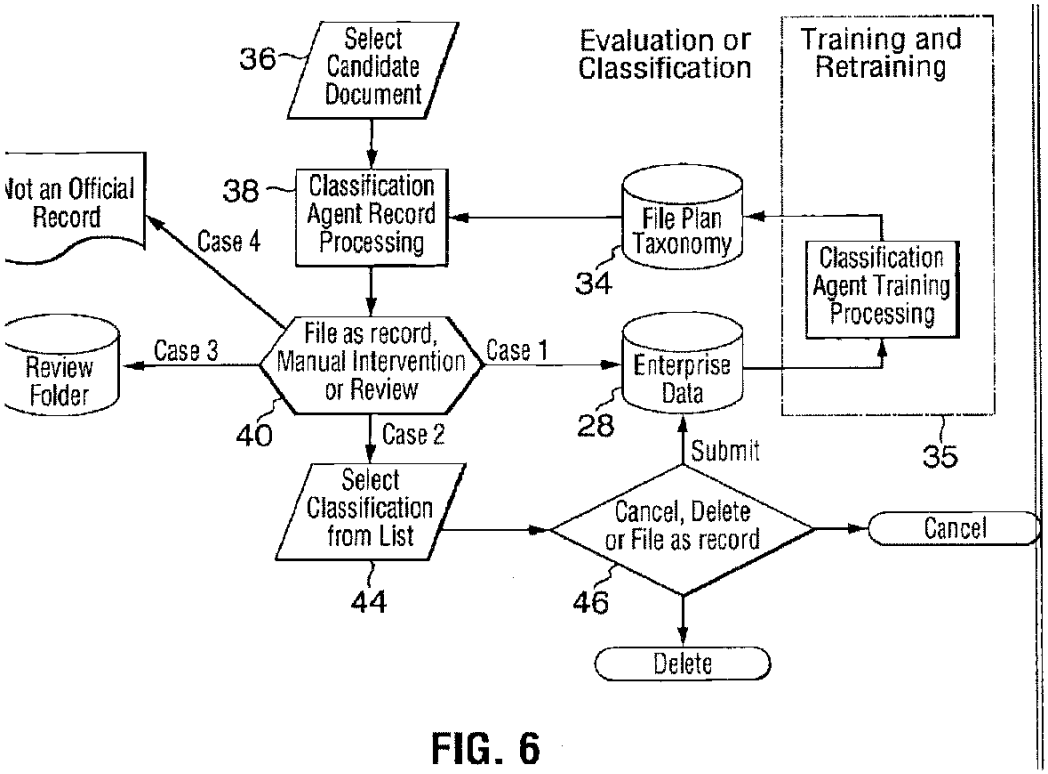


FIG. 6

While FIG. 6 includes a file plan taxonomy database 34, there is no taxonomy engine shown. Further, the textual portion of Summerlin relied on by the Examiner is the only reference in the entire application to a "taxonomy engine." It appears as though the Examiner has simply found some sort of reference to a "taxonomy engine," and has used it to make a dubious combination with the previously cited references (Hurwood and Clendinning). However, this feature of the claimed invention should not be viewed in a vacuum. Instead, these features must be viewed in combination with the features of the claims from which claims 5, 10, 15, and 20 depend. Viewed through this lens, claims 5, 10, 15, and 20 recite a full-text engine, a metrics engine, and/or a taxonomy engine that are capable of processing meta-document representations of objects that are never actually accessed by full-text engine, metrics engine, and/or taxonomy engine. Even if Summerlin does provide a generic teaching of a taxonomy engine (which is arguable), Summerlin certainly does not teach or suggest a taxonomy engine that would be analogous to the taxonomy

engine of the claimed invention. For at least this reason the rejections of claims 5, 10, 15, and 20 are improper and should be overturned.

VIII. 37 C.F.R. §41.37(c)(1)(viii) - CLAIMS APPENDIX

Appendix A: The pending claims (claims 1-20) are attached in Appendix A.

IX. 37 C.F.R. §41.37(c)(1)(ix) - EVIDENCE APPENDIX

Appendix B: (None)

X. 37 C.F.R. §41.37(c)(1)(x) - RELATED PROCEEDINGS INDEX

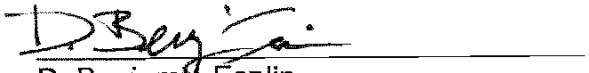
Appendix C: (None)

CONCLUSION

For at least the foregoing reasons, Appellant respectfully requests that the rejection of each of pending claims 21-40 be reversed.

Date: November 17, 2006

Respectfully submitted,

By: 

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APPENDIX A

CLAIMS

1. (*Previously Presented*) A method for using extensible markup language to normalize one or more object repositories, each of the one or more object repositories having one of a plurality of object repository types, the method comprising the steps of:

determining, from the plurality of possible object repository types, the one or more object repository types of the one or more object repositories that store at least one object, wherein the object comprises metadata;

identifying the at least one object stored in the one or more object repositories;

extracting at least one portion of the at least one object, by generating a meta-document representation of the at least one portion, the meta-document representation being generated in extensible markup language (XML) format;

transmitting the meta-document representation to a processor; and

processing the meta-document representation on the processor to normalize the one or more object repositories, wherein processing the meta-document representation comprises mapping a field in the meta-document representation with a field designation identifier.

2. (*Original*) The method of claim 1, wherein some of the metadata is preserved.

3. (*Original*) The method of claim 2, wherein the metadata that is preserved includes at least one of author, title, subject, date created, date modified, list of modifiers, and link list information.

4. (*Previously Presented*) The method of claim 1, wherein processing the meta-document representation further comprises one or both of categorization and full-text indexing.

5. (*Original*) The method of claim 1, wherein the processor comprises at least

one of a full-text engine, a metrics engine, and a taxonomy engine.

6. (*Previously Presented*) A system for using extensible markup language to normalize one or more object repositories, each of the one or more object repositories having one of a plurality of possible object repository types, the system comprising:

a determining module that determines, from the plurality of possible object repository types, the one or more object repository types of the one or more object repositories that store at least one object, wherein the at least one object comprises metadata;

an identifying module that identifies the at least one object stored in the one or more object repositories;

an extracting module that extracts at least one portion of the at least one object by generating a meta-document representation of the at least one portion, the meta-document representation being generated in extensible markup language (XML) format; and

a transmitting module that transmits the meta-document representation to a processor that processes the meta-document representation to normalize the one or more object repositories,

wherein processing the meta-document representation comprises mapping a field in the meta-document representation with a field designation identifier.

7. (*Original*) The system of claim 6, wherein some of the metadata is preserved.

8. (*Original*) The system of claim 7, wherein the metadata that is preserved includes at least one of author, title, subject, date created, date modified, list of modifiers, and link list information.

9. (*Previously Presented*) The system of claim 6, wherein processing the meta-document representation further comprises one or both of categorization and full-text indexing.

10. (*Previously Presented*) The system of claim 6, wherein the processing module comprises at least one of a full-text engine, a metrics engine, and a taxonomy engine.

11. (*Previously Presented*) A system for using extensible markup language to normalize one or more object repositories, each of the one or more object repositories having one of a plurality of possible object repository types, the system comprising:

determining means for determining, from the plurality of possible object repository types, the one or more object repository types of the one or more object repositories that store at least one object, wherein the object comprises metadata;

identifying means for identifying the at least one object stored in the one or more object repositories;

extracting means for extracting at least one portion of the at least one object by generating a meta-document representation of the at least one portion, the meta-document representation being generated in extensible markup language (XML) format; and

transmitting means for transmitting the meta-document representation to a processor that processes the meta-document representation to normalize the one or more object repositories,

wherein processing the meta-document representation comprises mapping a field in the meta-document representation with a field designation identifier.

12. (*Original*) The system of claim 11, wherein some of the metadata is preserved.

13. (*Original*) The system of claim 12, wherein the metadata that is preserved includes at least one of author, title, subject, date created, date modified, list of modifiers, and link list information.

14. (*Previously Presented*) The system of claim 11, wherein processing the meta-document representation further comprises one or both of categorization and full-text indexing.

15. (*Original*) The system of claim 11, wherein the processing means comprises at least one of a means for full-text indexing the at least one object, means for extracting metrics information from the at least one object, and means for categorizing the at least one object.

16. (*Previously Presented*) A processor readable medium comprising processor readable code for causing a processor to normalize one or more object repositories, each of the one or more object repositories having one of a plurality of possible object repository types, the medium comprising:

determining code that causes a processor to determine, from the plurality of possible object repository types, the one or more object repository types of the one or more object repositories that store at least one object, wherein the at least one object comprises metadata;

identifying code that causes a processor to identify the at least one object stored in the one or more object repositories;

extracting code that causes a processor to extract at least one portion of the at least one object by generating a meta-document representation of the at least one portion, the meta-document representation being generated in extensible markup language (XML) format;

transmitting code that causes a processor to transmit the meta-document representation to a processor; and

processing code that causes the processor to process the meta-document representation to normalize the one or more object repositories,

wherein processing the meta-document representation comprises mapping a field in the meta-document representation with a field designation identifier.

17. (*Original*) The medium of claim 16, wherein some of the metadata is preserved.

18. (*Original*) The medium of claim 17, wherein the metadata that is preserved includes at least one of author, title, subject, date created, date modified, list of modifiers, and link list information.

19. (*Previously Presented*) The medium of claim 16, wherein processing the meta-document representation further comprises one or both of categorization and full-text indexing.

20. (*Original*) The medium of claim 16, wherein the processing code comprises at least one of a full-text engine, a metrics engine, and a taxonomy engine.

APPENDIX B

EVIDENCE APPENDIX

NONE

APPENDIX C

RELATED PROCEEDINGS INDEX

NONE